

## **BNL REVIEW**

### **AGS Upgrade and Super Neutrino Beam Facility**

**June 10 – 11, 2004**

**Bldg. 911B, Large Conference Room**

#### **June 10, Thursday**

08:30 – 09:00	Executive Session	
09:00 – 09:15	Opening Remark	T. Kirk
09:15 – 10:00	Overview of the Project	W. T. Weng
10:00 – 10:30	1.2 GeV SCL	D. Raparia
10:30 – 11:00	Cryogenic System	K. C. Wu
11:00 – 11:30	AGS Power Supply	I. Marneris
11:30 – 12:00	AGS RF System	M. Brennan
12:00 – 13:30	Lunch	
13:30 – 14:00	AGS Transition Crossing	J. Wei
14:00 – 14:30	AGS Injection and Extraction	N. Tsoupas
14:30 – 15:00	Beam Transport to Target	D. Raparia
15:00 – 15:30	Configuration of Target/Horn and Neutrino Spectra	M. Diwan
15:30 – 16:00	Mechanical Design of the Target/Horn System	S. Bellavia
16:00 – 16:45	Target Hill and Service Building	A. Pendzick
16:45 – 17:15	Conventional Facilities and Utilities	T. Nehring

#### **June 11 Friday**

08:30 – 09:00	Executive Session	
09:00 – 09:30	Horn Power Supply	A. Zhang
09:30 – 10:00	Radiation Shielding	D. Beavis
10:00 – 10:30	Near Detector	S. Kahn
10:30 – 11:00	ESSH	E. Lessard
11:00 – 11:30	Cost Estimate	K. Mirabella
11:30 – 12:00	Construction Schedule and Operational Scenarios	W. T. Weng
12:00 – 13:30	Lunch	
13:30 – 14:30	Questions and Answers	
14:30 – 15:30	Executive Session	
15:30 – 16:15	Closeout	

### Things to do for review, white paper

- 1) write beam section Hkirk, Skahn, MVD
- 2) new target geometry Skahn, MVD
- 3) examine horn focusing geometry in more detail, completely redesign horn to take advantage of new manufacturing technologies. JGallardo
- 4) examine errors on the spectrum due to errors in production SKAHN
- 5) Examine 1 deg offaxis running in more detail. MVD
- 6) loss of flux due to various practical issues: shielding around horn, windows for He, window for tunnel (if evacuated). Window for tunnel if He, water in the horns...
- 7) Near detector. How to use ? Skahn
- 8) Can near detector be farther ? Skahn

### Things to do for APS study from us

- 1) write paper including antineutrino running.
- 2) Examine 1290 km
- 3) Examine effect on CP measurement due to ambiguities from  $\theta_{23}$  and  $\Delta m_{21}^2$ .

### Longer term:

- 1) Water Cherenkov simulation
- 2) Detector optimization for containment
- 3) Detector optimization for electron ID
- 4) Photo multiplier R&D
- 5) Liquid argon versus water cherenkov.
- 9) More long term: simulate AlBeMet geometry with target integrated into horn, plasma lense (?)